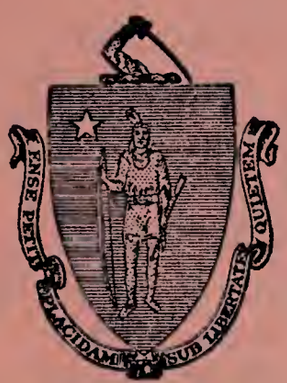
The Commonwealth of Massachusetts

DIVISION of STATE COLLEGES

WORCESTER STATE COLLEGE



1972

SUMMER SESSION

JULY 3 — AUGUST 11, 1972

Program of Continuing Studies and Graduate Studies

Telephone: 799-2405 or 756-5121

FACULTY

JOHN F. EAGER, B.S., Ed.M., Director of Continuing Studies
PAUL F. O'NEIL, B.S., B.S., Ed.M., Associate Director of Continuing Studies
FRANCISCO ALCALA, B.A., M.A., Ph.D.
RUTH J. ALLEN, B.S., Ed.M.
NEIL F. BROPHY, B.A., M.A.
MICHAEL A. BURKE, A.B., Ed.M., M.A.T.
RICHARD E. CALLAHAN, B.A., Ed.M., M.A.T.
VITO D. CAMPO, B.E., Ed.M., M.A.
DORIS N. CARTER, B.S., M.A.
JACQUELINE G. CASALE, B.A., M.A.
BRUCE S. COHEN, B.A., M.A.
JOSEPHINA S. CONCANNON, B.S., Ed.M., Ed.D.
PAUL DAVIS, B.S., Ed.M.
ALFRED F. EDDY, A.B., M.A.
PAUL J. EDMUNDS, A.B., M.A., Ph.D.
DOROTHY GIRDANO, B.S., M.A., Ph.D.
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ABRAM KAMINSKY, B.M.E., M.M.E.
GEORGE T. KELLEY, B.A., M.A.
GERTRUDE R. LEEDS, A.B., M.A.
PAUL J. McCARRON, B.S., Ed.M.
BERNARD L. McGOUGH, A.B., Ed.M., M.S.
JOHN F. McLAUGHLIN, B.S., Ed.M.
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WILLIAM K. MASTERSON, A.B., M.A., M.A.
MELVIN MERKEN, B.S., M.A., Ed.D.
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KATHRYN R. O'DONNELL, B.S., M.A.
J. FRANCIS O'MARA, B.A., Ed.M., M.A., Ph.D.
CHAD C. OSBORNE, B.A., M.A.

ROBERT J. PERRY, A.B., M.A.
VINCENT PICCOLO, A.B., M.S.
A. BARBARA PILON, A.B., Ed.M., Ph.D.
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HELENA V. SEMERJIAN, B.S., Ed.M.
EMMETT A. SHEA, B.S., Ed.M., M.A.
JOSEPH A. SHEA, B.S., M.A., Ph.D.
MAUREEN STEFANINI, B.S., Ed.M.
G. FLINT TAYLOR, A.B., Ed.M., C.A.G.S., Ph.D.
ROBERT W. THOMPSON, B.S., M.A.
DONALD F. TRAUB, A.B., M.A., M.A.

GENERAL INFORMATION

The courses announced in this bulletin are offered by the Massachusetts Division of State Colleges in cooperation with Worcester State College. The Division of State Colleges reserves the right to cancel any course which does not have a minimum of 20 enrollments.

Both graduate and undergraduate courses are offered. Courses carrying undergraduate credit only are numbered in the 7-series; courses carrying both graduate and undergraduate credit are numbered in the 8-series; courses carrying graduate credit only are numbered in the 9-series.

REGISTRATION POLICY

Matriculating students in the Master's or Bachelor's program may register on May 31, 1972 and June 1, 1972 from 1:00 p.m.–4:30 p.m.

All other students who desire to register for course offerings will register June 5, 1972 through June 9, 1972 from 1:00 p.m.–4:30 p.m.

Registration will be held at the Worcester State College Graduate Office, Room S–112, Science-Laboratory Building.

Matriculation cards must be passed in at the time of registration.

No Multiple Registrations. One Person—One Registrant.

TUITION AND FEES

Our bookkeeping operation cannot accommodate cash payments or partial or installment payment of tuition or fees. Check or money order for the full amount of tuition and fees is due at the time of registration.

Tuition

Massachusetts resident	$18.00 per semester hour
Non-Resident	25.00 per semester hour
Audit (Resident and Non-Resident)	11.00 per semester hour

Fees

Registration Fee	10.00 (Non-Refundable)
Library Fee	5.00 (Non-Refundable)
Late Registration Fee	2.00
Course Change Fee	2.00
Graduate Fee (Persons receiving degrees)	5.00

UNDER NO CIRCUMSTANCES WILL ANY OF THE REGISTRATION AND LIBRARY FEES BE RETURNED.

A payment of tuition and/or fees made at the time of registration with a bad check will result in the cancellation of the student's registration until the tuition and/or fees and the penalty are properly paid. The penalty fee for tendering a bad check is $10.00.

ALL TUITION AND FEES ARE DUE THE DAY OF REGISTRATION AND ARE PAYABLE BY CHECK OR MONEY ORDER.

Tuition Refunds

Refunds for withdrawal from a course will be made according to the following schedule:

Attendance at the first class meeting only	100% refund
Attendance at class meetings 2, 3, 4 or 5	60%
Attendance at class meetings 6, 7, 8, 9 or 10	20%
Attendance at any class meeting after the 10th	0%

A student who is entitled to a refund must obtain a form for each course for which a refund is due and file it with the Office of the Program of Continuing Studies. Forms are available at the Graduate Office. Telephone and other unofficial notices will not be accepted as notification of withdrawal.

THE DAY AND TIME THAT THE NOTICE IS RECEIVED WILL BE THE OFFICIAL DATE OF WITHDRAWAL.

Withdrawal

Ceasing to attend a class does not constitute official withdrawal from a course. If notice is not given to the Office of Continuing Studies, a grade of failure (F) will be recorded.

VETERANS

World War II and Korean

Any resident of Massachusetts who has served in any branch of the armed forces for at least 90 days, one of which must have been served either between September 16, 1940 and December 31, 1946, or between June 25, 1950 and January 31, 1955 and who has a discharge other than dishonorable may enroll without charge for instruction in any course here offered within the established limitation of 120 semester hours. To establish his eligibility the veteran must present his discharge (or photostatic copy) or a certificate of satisfactory service in the case of officers, together with proof of residence in advance of the opening date of the class meeting.

Vietnam Period

Veterans who have served at least 180 days between February 1, 1955 and the termination of the Vietnam emergency, and whose service was credited to Massachusetts are also exempt from paying tuition if they are in a Bona Fide Bachelor or Master's program. To obtain this exemption the following procedure must be observed.

1. The veteran presents photostat of his discharge papers to the State Adjutant General, Room 184, State House, Boston, Massachusetts, and obtains certification that he meets the necessary requirements and that his service is credited to Massachusetts.
2. At registration, the veteran obtains a letter stating that he is enrolled in the Program of Continuing Studies for a given number of semester hours.
3. This letter and the certificate from the State Adjutant General are submitted to the Massachusetts Department of Education, (Miss Mary Lyons, Department of Education, 182 Tremont St., Boston, Ma. 02111.)
4. The certificate of Exemption from Tuition which is issued by the Department of Education is then presented to the Program of Continuing Studies.

Any veterans of the military service who do not fit into the above categories will be considered non-veteran for registration purposes. However, it is possible that some veterans who are not eligible for exemption

from the Commonwealth of Massachusetts may be entitled to reimbursement or subsistence from the Veteran's Administration. All veterans whether or not exempt from paying tuition, must pay all fees.

Note: If this is your first enrollment, you must contact your Veteran's Administration Office for information on reimbursement. If you have enrolled in courses at Worcester State College, you, upon completed registration here, will be enrolled by the Office of Continuing Studies for Veteran's reimbursement.

CREDIT

Regulations and requirements for degree study may be obtained at the Office of the Director of Continuing Studies, Worcester State College. It is urgently recommended that the guidance and advice of the Director and your faculty advisor in your field of concentration, wherein you must have five approved courses, be sought and faithfully followed in planning a program of study. For teachers in service, a maximum of six semester hours of credit per semester may be credited toward a degree.

The Graduate Record Examination, required of all graduate degree students, will be conducted at Worcester State College. The bulletin of information and application blanks can be secured at the Director's Office, Room S–112, Science Building at Worcester State College. Registration through Educational Testing Service, Princeton, New Jersey should be completed three weeks prior to the test.

FOR DEGREE CANDIDATES, ONLY THE "APTITUDE PART OF THIS TEST IS REQUIRED AND IT MUST BE TAKEN DURING THE FIRST YEAR OF GRADUATE STUDY".

The degree of Master of Education is awarded at the State Colleges at Boston, Bridgewater (including Hyannis Summer Session), Fitchburg, Framingham, North Adams, Salem, Westfield and Worcester. Graduate courses in partial fulfillment of the requirements for this degree may be offered from time to time in the other State Colleges and the Massachusetts College of Art, subject to advance approval by Worcester State College.

The GRADUATE COMPREHENSIVE EXAMINATION will be conducted on July 28, 1972 at 2:00 p.m.

ALL DEGREE CANDIDATES MUST FILE AN "INTENTION TO GRADUATE" FORM WITH THE DIRECTOR IN ROOM S–112 WHEN REGISTERING FOR THE FINAL COURSE.

LIBRARY CARDS: If you do not have a library card, please register in the library for one.

POST Ed. M. STUDENTS MUST RECEIVE THE HONOR GRADES OF A OR B FOR CREDIT.

Assistance in selection and registering in all courses is available in Room S–112, Science Laboratory Building, the Worcester State College Graduate Office, telephone: 799–2405 or 756–5121.

Students must park in the Student Parking Areas behind the Science-Laboratory Building or the side and the rear of the Gymnasium Building.

ALL COURSES CARRY THREE SEMESTER HOURS OF CREDIT

No.	Course Title	Instructor	Room
	FIRST PERIOD BEGINNING AT 8:30 A.M. (Daily to 9:45 A.M.)		
SS9–752	Adv. Psych. Fnds of Education, Sec. A	Joseph Shea	S–126
SS9–77	Elem. School Curriculum for the Seventies	George T. Joseph	S–214
SS8–211	Human Anatomy & Physiology I	Paul A. Holle	S–132
SS8–461	Innov. Approaches to Teaching Social Studies	Felix Masterson	S–217
SS8–775	Intro. to Philosophical Fnds. of Education, Sec. A	William K. Masterson	S–212
SS8–871	Intro. to Organic & BioChemistry	Melvin Merken	S–301
SS9–60	Lab. Practicum in Remedial & Corrective Reading (6S.H.) 8:30–11:10 A.M.	J. Francis O'Mara	Sci Stu Hall
SS9–69	Measurement of Intelligence (WAIS–WISC)	G. Flint Taylor	S–227
SS8–61	Principles & Practices in Guidance	Paul McCarron	S–228
SS8–178	Short Story	Kathryn O'Donnell	S–125
SS8–492	Russia in the Twentieth Century	Emmett A. Shea	S–124
SS8–44	Speech Correction & Clinical Practices	Richard Callahan	S–223
SS8–92	Teaching Music in Elementary Grades	Abram Kaminsky	S–123
SS8–93	Strategies in Modern Instruction	Ruth Griffiths	S–226
	SECOND PERIOD BEGINNING AT 9:55 A.M. (Daily to 11:10 A.M.)		
SS8–263	Creative Painting I and II	Jacqueline Casale	Art Rm.
SS8–442	Geography of Manufacturing	Robert Thompson	S–126
SS8–212	Human Anatomy & Physiology II	Terry Graham	S–128
SS8–776	Intr. Philosophical Fnds. of Education, Sec. B	William K. Masterson	S–212
SS8–750	Intro. Psychological Fnds. of Education	Joline Jones	S–217
SS8–272	Library Catologing & Classification, Pt. I	Vincent Piccolo	LRC 3280
SS8–551	Modern Math for Elementary Teachers	Kenneth Schoen	S–219A
SS8–88	New Approaches to Teaching English	Chad Osborne	S–219B
SS9–57	New Trends in Teaching of Reading	Marion J. Jennings	S–132
SS9–88	Organization & Administration of Elementary School	George T. Joseph	S–214
SS8–550	Plane Geometry — An Isometric Approach	Robert Perry	S–117A
SS8–491	Populism and Progressivism	Bruce Cohen	S–124
SS9–51	Research in Education, Sec. A	Alfred F. Eddy	S–227
SS9–98	School Finance	Robert W. Goss	S–314
SS9–90	School Law	Paul J. McCarron	S–228
SS8–39	Speech Pathology	John McLaughlin	S–125
SS9–85	Supervision in Today's Schools	Ruth Griffiths	S–226
SS8–70	Intro. to Audio-Visual Methods & Materials	Paul Davis	A–110
	THIRD PERIOD BEGINNING AT 11:20 A.M. (Daily to 12:35 P.M.)		
SS9–777	Adv. Philosophical Fnds. of Education, Sec. A	Neil Brophy	S–128
SS8–261	Art for the Classroom Teacher	Doris Carter	Art Rm

No.	Course Title	Instructor	Room
SS8–277	Administration of Instructional Media Center	Vincent Piccolo	LRC 3280
SS9–58	Diagnosis & Correction of Reading Difficulties	Marion J. Jennings	S–132
SS8–56	Foundations of Reading	Ruth Allen	S–225A
SS9–868	Laboratory Workshop in Natural Science	Melvin Merken	S–301
SS9–65	Occupational Information	G. Flint Taylor	S–227
SS8–443	Physical Geography	Robert Thompson	S–126
SS9–57	Reading Skills in Secondary School	Doris Joyce	S–125
SS9–101	School Public Relations	Robert W. Goss	S–314
SS8–187	Influence of Romantics on Modern Poets	Paul J. Edmunds	S–226

EVENING CLASSES

MONDAYS, TUESDAYS, & THURSDAYS, 7:00 to 9:45 P.M. (Fifteen Meetings)

SS9–778	Adv. Philosophical Fnds. of Education, Sec. B	Donald F. Traub	S–224
SS9–753	Adv. Psychological Fnds. of Education, Sec. B	Richard O'Connor	S–205
SS9–953	Biology of Animal Reproduction	Bruce Russell	S–132
SS8–279	Communication Theory	Robert Jones	LRC 3280
SS8–493	Comparative Revolution	Gertrude Leeds	S–123
SS8–466	Contemporary Criticism of American Economy	George Kelley	S–312
SS9–601	Continuing with Spanish	Francisco Alcala	S–311B
SS8–606	French Phonetics	Robert Hartwig	S–311A
SS8–175	Modern Drama	Jeffrey Roberts	S–126
SS8–577	Number Systems	Vito Campo	S–125
SS9–66	Personnel Placement Services	To Be Announced	S–219A
SS8–470	Principles of Sociology	Frank Pizziferri	S–313
SS8–270	Reference Sources, & Methods, Pt. I	Bernard McGough	LRC 323
SS9–52	Research in Education, Sec. B	David Hilton	S–226

INSTITUTE

SS8–101 Styles and Strategies in Early Childhood Education — Josephina Concannon, Director

Classes held in the New Theatre at Worcester State College
First Week: June 26–30 Time: 8:30–11:30 and 1:00–3:00 P.M.
Second Week: July 3–7 Time: 1:00–3:30 P.M.

SPECIAL WORKSHOPS

(Two Weeks)

8:15 - 12:30 p.m.

SSW8–002	Behavioral Objectives, Help or Hindrance July 3–14	David Quist	LRC 161N
SSW8–003	Creative Writing for Elementary Children July 31–August 11	A. Barbara Pilon	S–225B

No.	Course Title	Instructor	Room
SSW8–004	Drug Education Workshop July 3–14	Dorothy Girdano	S–117B
SSW8–005	Creative Thought & the Minority Experience July 17–28	Catherine Quint	S–211B
SSW8–006	Movement Education Workshop July 3–14	Helena Semerjian	G–23
SSW8–007	Open Classroom Theories Workshop July 17–28	Marilyn Helfenbein	S–211A
SSW8–008	Wkshp. in Tchg. New Elem. School Science Programs July 3–14	Michael Burke	S–304
SSW8–009	Dev. Individual Math Activities Elem. Level July 17–28	Maureen Stefanini	S–316

COURSE DESCRIPTIONS

SS9-752 Adv. Psychological Fnds of Education, Sec. A **Rm. S-126 3 sem. hrs.**

In this course class-members will study and evaluate the role of those environmental, mental and extra-mental forces which motivate all learners to utilize fully and effectively their capacities, aptitudes. It includes a systematic analysis of the major schools of psychology with special attention focussed on contemporary schools. Attention is given to the teachers' role in the learning process and special emphasis will be centered on the application of these principles to specific classroom situations. Prerequisite: Nine semester hours undergraduate credit in General Psychology and Educational Psychology or their equivalency.

JOSEPH A. SHEA — Daily: 8:30 a.m.

SS9-77 Elementary School Curriculum for the 70's **Rm. S-214 3 sem. hrs.**

The investigation of recent development in practices, materials of instruction and techniques, and unit and activity planning will be placed on types of lessons, techniques of assignments and diagnostic procedures.

GEORGE T. JOSEPH — Daily: 8:30 a.m.

SS8-211 Human Anatomy and Physiology I **Rm. S-132 3 sem. hrs.**

This course will consider the anatomy and physiology of the human body under normal circumstances-the organization, integration, and dynamics of the following areas and systems being stressed; pre-tissue bilogy, histology, skeletal, muscular, cardiovascular, and nervous. The lectures and text will be augmented by appropriate physiological demonstrations and/or experiments, as well as dissection of selected organs and specimens in the laboratory.

PAUL A. HOLLE — Daily: 8:30 a.m.

SS8-461 **Innov Appr to the Tchg of History and Social Studies** **Rm. S-217 3 sem. hrs.**
This course will teach the use of behavioral objectives in the development of the "Inquiry" or "Discovery" approach to the teaching of History and the Social Studies. The emphasis would be placed on the theory behind this approach and the actual building of "models" implementing these ideas.
FELIX MASTERSON Daily: 8:30 a.m.

SS8-775 **Intro Philosophical Fnds of Education, Sec. A** **Rm. S-212 3 sem. hrs.**
This course is an historial approach to the study of educational thought and includes an examination of primary educational concepts which have evolved through Western thought to the present day. Selections from the great documents in educational thought are studied in relation to the historical period in which they are produced. The student is expected to read and analyze the original contributions of the major educational philosophers.
WILLIAM K. MASTERSON Daily: 8:30 a.m.

SS8-871 **Introduction to Organic and Biochemistry** **Rm. S-301 3 sem. hrs.**
The organic portion of this course will emphasize the study of group properties as determined by modern electronic theory and molecular structure. Topics in biochemistry include nucleic acids, biochemical reactions, enzymes, the biochemistry of disease, and other principles. Representative laboratory experiments will be performed. A previous knowledge of general chemistry is desirable but not essential.
MELVIN MERKEN Daily: 8:30 a.m.

SS9-60 **Laboratory Practicum in Remedial and Corrective Reading at Elementary Level** **Rm. Science Study Hall 6 sem. hrs.**
Study will be made of the symptoms and causes of reading disabilities and the procedures which may be used to aid in their correction. Each graduate student will be required to diagnose and analyze a pupil's reading difficulties through formal and informal testing procedures. A remedial program will be initiated and carried out for the pupils in a clinical setting. Cases will be from grades three through six. A case history of the remedial pupil will be required. This will include initial and final testing results along with the remedial techniques used. A double period time block will consist of a seminar on the diagnostic and corrective procedures, followed by a work period with the pupil under the supervision of the course instructor. Course prerequisites: 1. Three years of teaching experience at the elementary level. 2. One basic course in the teaching of reading at the elementary school level. 3. Diagnosis & Correction of Reading Difficulties. The course will carry six (6) semester hours graduate credit. Class size will be limited.
J. FRANCIS O'MARA Daily: 8:30–11:30 a.m.

SS9-69 **Measurement of Intelligence (WAIS-WISC)** **Rm. S-227 3 sem. hrs.**
Study will be made of two major Wechsler tests, namely Wechsler

Adult Intelligence Scale (WAIS) and the Wechsler Intelligence Scale for Children (WISC). Students will have opportunity for practical work in administration and interpretation of both these scales. The course is designed for classroom teachers, special education teachers, school psychologists and guidance personnel. A certificate will be issued to those who complete the testing requirements under supervision.

G. FLINT TAYLOR — Daily: 8:30 a.m.

SS8-61 **Principles and Practices in Guidance (Guid I)** — **Rm. S-228 3 sem. hrs.**

This is an introductory course designed to provide the student with an understanding of the need, meaning and scope of guidance services. The principles and practices involved in the following guidance areas will be considered; introduction and philosophy of guidance; understanding the individual and his needs; essential orientation activities for the student; collecting, recording, and evaluating data; interviewing and counseling; organization and evalution of guidance. The emphasis of the course will be placed upon the role of the classroom teacher in the guidance program.

NOTE: This course or its equivalent is a prerequisite for all advanced courses in guidance.

PAUL J. MCCARRON — Daily: 8:30 a.m.

SS8-492 **Russia in the Twentieth Century** — **Rm. S-124 3 sem. hrs.**

This course will focus on the major political, social and economic aspects of Russia during the present century. Special attention will be devoted to Soviet foreign policy since 1945.

EMMETT SHEA — Daily: 8:30 a.m.

SS8-460 **Secondary Social Studies Curriculums** — **Rm. S-225A 3 sem. hrs.**

The following class is prepared for inclusion in the offerings for summer school this year. The course is designed particularly for secondary school social studies teachers, administrators, curriculum directors, and college seniors who intend to become social studies teachers.

The purpose of the course is to increase the knowledge and deepen the professional experience of social studies teachers. This would be accompanied by an examination and evaluation of several social studies curriculums.

JOSEPH E. ZEGARRA — Daily: 8:30 a.m.

SS8-44 **Speech Correction and Clinical Practicum** — **Rm. S-223 3 sem. hrs.**

Practical experience in the diagnosis and treatment of speech defects under clinical supervision. To teach the student speech therapist the techniques of managing the speech defective client. Parent contact, client counseling techniques, program initiation and management are stressed. Therapy materials and instrumentation

are taught to prepare the student for the practice of speech therapy. Content outline: Assess type, severity of speech disorder, provide prognosis and institute therapy procedures. Learn to acquire case history from all referring informants. Relate appropriate information to informants and utilize parents and teachers in therapy program. Establish group or individuals therapy with proper tools, materials and instruments. Learn to establish goals by planning therapy.

RICHARD CALLAHAN — Daily: 8:30 a.m.

SS8-178 Short Story — **Rm. S-125 3 sem. hrs.**

This course is designed to provide a study of the development of the short story as a literary form, and an analysis of its techniques through a study of examples from the works of world writers. Practice in interpretative analysis and critical evaluation is provided.

KATHRYN R. O'DONNELL — Daily: 8:30 a.m.

SS8-92 Strategies in Modern Instruction — **Rm. S-226 3 sem. hrs.**

In this course, a study will be made of procedures for developing growth and strengths in the teaching of school subjects in the elementary and secondary schools. Practical solutions to everyday problems gained from experience will be shared by class members.

RUTH GRIFFITHS — Daily: 8:30 a.m.

SS8-82 Teaching Music in the Elementary Grades — **Rm. S-123 3 sem. hrs.**

The place of music in the elementary curriculum with emphasis placed upon the child voice, selection and presentation of rote songs and understandings needed by the classroom teacher for guiding growth in rhythms, notational, and listening experiences, survey of music books and materials, recordings, and other audio-visual materials used in the elementary school music program.

ABRAM KAMINSKY — Daily: 8:30 a.m.

SS8-263 Creative Painting I and II — **Art Room 3 sem. hrs.**

A study of the representative schools of painting with particular attention to the many personal applications which this study would promote. Projects will include using the same techniques as the artists who are discussed. Students will be expected to provide some of the materials used.

JACQUELINE G. CASALE — Daily: 9:55 a.m.

SS8-442 Geography of Manufacturing — **Rm. S-126 3 sem. hrs.**

A systematic study of the spatial distribution of manufacturing activities with an analysis of their locations employing industrial location theory. The North American and West European iron and steel, motor vehicle, petroleum refining, aluminum, and cotton textile industries are used as case studies. Other topics include transportation cost structures, technological change and the geography of the Industrial Revolution. A field trip to the Saugus

Ironworks Restoration, the birthplace of America's iron and steel industry, will be required.

ROBERT THOMPSON — Daily: 9:55 a.m.

SS8-212 **Human Anatomy and Physiology II** — **Rm. S-128**

This course will consider the anatomy and physiology of the human body under normal circumstances-the organization, integration, and dynamics of the following areas and systems being stressed: respiratory, digestive, excretory (water balance), endocrine, and reproduction. The lectures and text will be augmented by appropriate physiological demonstrations and/or experiments, as well as dissection of selected organs and specimens in the laboratory.

TERRY GRAHAM — Daily: 9:55 a.m.

SS8-70 **Introduction to Audio-Visual Methods and Materials** — **Rm. A-110 3 sem. hrs.**

This is an introductory course for the classroom teacher in the utilization of all types of audio-visual materials for improving instruction. By means of lecture, discussion and demonstration, students will learn the criteria in selection of materials, planning for their use, evaluation of methods, advantages and limitations of various materials, and implications of research. Each class member learns the operation of mechanical equipment as well as sources of audio-visual materials for the various curricula.

PAUL DAVIS — Daily: 9:55 a.m.

SS8-776 **Introduction Philosophical Foundations of Education, Sec. B** — **Rm. S-212 3 sem. hrs.**

This course is an historical approach to the study of educational thought and includes an examination of primary educational concepts which have evolved through Western thought to the present day. Selections from the great documents in educational thought are studied in relation to the historical period in which they are produced. The student is expected to read and analyze the original contributions of the major educational philosophers.

WILLIAM K. MASTERSON — Daily: 9:55 a.m.

SS8-750 **Introduction to Psychological Foundations of Education** — **Rm. S-217 3 sem. hrs.**

This course covers the theoretical aspects of psychology for the classroom teacher. It includes a systematic analysis of the major schools of psychology and a study of the effects of heredity and environment. Reading in the following areas will be required: results of research on growth and development, theories of intelligence, concepts in measurement and evaluation, individual differences in capacity and achievement and learning theory.

JOLINE JONES — Daily: 9:55 a.m.

SS8-272 **Library Cataloging and Classification, Pt. I** — **Rm. LRC 3280 3 sem. hrs.**

This course covers the principles and practice of cataloging books

using the Dewey Decimal System of subject classification, Sear's List of Subject Headings, and the ALA Cataloging Rules for Author and Title Entry. A brief introduction to over-all technical services for the small library and methods of indexing non-book materials commonly found in the modern school library will be included.

VINCENT PICCOLO — Daily: 9:55 a.m.

SS8-551 **Modern Mathematics for the Elementary** — **Rm. S-219A 3 sem. hrs.**

This course is designed to provide the mathematical concepts needed to teach any of the new approaches found in modern arithmetic textbooks and to prepare prospective teachers for inevitable future changes in mathematics curricula. This will include a study of the structure of the number systems, sets, set operations, and numeration systems.

KENNETH SCHOEN — Daily: 9:55 a.m.

SS8-88 **New Approaches to Teaching of English** — **Rm. S-219B**

A course for English teachers in approaches to language arts that stress the student's active use of language in a variety of situations, voices and levels of discourse. The basic reading — which students are encouraged to start reading in advance of the course — will be James Moffett's A Student-Centered Language Arts Curriculum, Grades K-13: A handbook for teachers (Houghton Mifflin, 1968). Some attention will be given to questions of grammar and the sentence. Classes will be conducted mainly as workshops in practicing the Moffett approaches.

CHAD OSBORNE — Daily: 9:55 a.m.

SS9-57 **New Trends in the Teaching of Reading** — **Rm. S-132 3 sem. hrs.**

This course is designed to cover the function of reading in the modern school program, effective procedures for developing the basic reading skills, practical techniques for improving pupil competence in the reading-study skills of content areas and methods of diagnosing and correcting reading deficiences. Prerequisite: The Teaching of Reading or permission of instructor.

MARION J. JENNINGS — Daily: 9:55 a.m.

SS9-88 **Organization and Administration Elem School** — **Rm. S-214 3 sem. hrs.**

The course will emphasize the many facets of elementary school administration and the larger setting of present day education will be stressed. Specifically, the course will deal with the principal's role in organizing for teaching and learning, administering pupil and staff personnel, special services, and integrating school and community life.

GEORGE T. JOSEPH — Daily: 9:55 a.m.

SS8-550 **Plane Geometry — An Isometric Approach** — **Rm. S-117A 3 sem. hrs.**

This course is geared to Junior and Senior High School Mathe-

matics Teachers. Only a minimal background in Geometry is assumed. The mappings of the plane onto itself preserving distance will be used as a basic tool. A familiarity with the real number system and its properties will be assumed, but explanation will be made when necessary.

ROBERT J. PERRY — Daily: 9:55 a.m.

SS8-550 **Populism and Progressivism** — **Rm. S-124 3 sem. hrs.**

This course will examine America's transition from a developing nation to a world power. Emphasis will be placed upon immigration, urbanization, industrialization as well as the Populist and Progressive responses to the transition. The instructor will trace the development of American economic and social life from the Civil War to the present.

BRUCE COHEN — Daily: 9:55 a.m.

SS9-51 **Research in Education, Sec. A** — **Rm. S-227 3 sem. hrs.**

This course will stress the use of appropriate research methods the selection and evaluation of data. It is designed to aid teachers in the preparation and understanding of educational research reports. Points of emphasis will include the nature of research, library techniques and resources, selection and delimitation of problems, documentation, organization and format of a report, appraisal of educational literature, necessary statistical concepts and methods of research. The student will be expected to demonstrate his knowledge of these in a term paper.

ALFRED F. EDDY — Daily: 9:55 a.m.

SS9-97 **School Finance I** — **Rm. S-314 3 sem. hrs.**

This course concerns itself with the financial support and the allocation of resources in public education. Topics: Personnel salaries, capital outlay, developmental expenditures, and the budgetary process. Topics to be considered are supply and demand in educational expenditures as a part of national, state and local income.

ROBERT W. GOSS — Daily: 9:55 a.m.

SS9-90 **School Law** — **Rm. S-228 3 sem. hrs.**

This course is designed to acquaint administrators and teachers with school laws affecting public education in the United States, with particular emphasis upon the state and community laws of Massachusetts. Attention will be given to such topics as legal status of school committees, contractual rights and obligations of teachers, the suspension and expulsion of pupils and school attendance.

PAUL J. MCCARRON — Daily: 9:55 a.m.

SS8-39 **Speech Pathology** — **Rm. S-125 3 sem. hrs.**

The nature of functional and organic speech disorders with emphasis on speech development, articulation problems and stuttering; principles of diagnosis and therapy are considered.

JOHN MCLAUGHLIN — Daily: 9:55 a.m.

SS9-85 **Supervision in Today's Schools** **Rm. S-226 3 sem. hrs.**
This course is designed as an introductory course in supervision for teachers, school administrators and supervisors at both the elementary and secondary school levels. Significant topics included in the course are: concepts of supervision; principles of supervision; organization for supervision; group process; techniques of supervision; and the evaluation and improvement of instruction, curriculum, and the supervisory program.
Opportunity will be provided for concentrated study and application of the materials of the course to elementary, secondary, or special subject work. This course, or its equivalent is prerequisite for all advanced courses in supervision.
RUTH GRIFFITHS Daily: 9:55 a.m.

SS9-777 **Advance Philosophical Fnds of Education, Sec. A** **Rm. S-128 3 sem. hrs.**
This course has the two-fold purpose of (1) studying and evaluating the contributions made by outstanding philosopher-educators both of the past but especially of the modern eras, and (2) analyzing the basic philosophical issues and problems in education and society and the alternatives posed by the different philosophical systems and assumptions. The student is expected to read and analyze the original contributions of the major educational philosphers in order to determine to what extent a synthesis of viewpoint may be achieved. Prerequisites: Undergraduate credits in both Philosophy and in Philosophy of Education or equivalency.
NEIL BROPHY Daily: 11:20 a.m.

SS8-261 **Art for the Classroom Teacher** **Rm. Art Room 3 sem. hrs.**
In this studio workshop students will enrich their experiences in dealing with the art materials, skills, and techniques valuable to the classroom teacher. A combination lecture, informal discussion and activity course will provide individual and group work in such areas as basic drawing, painting, lettering and modeling. Exhibits, reproductions and slides will be used as enrichment material.
DORIS CARTER Daily: 11:20 a.m.

SS8-227 **Administration of the Instructional Media Center** **Rm. LRC 3280 3 sem. hrs.**
Covers the theory and practice of administering a collection of print and non-print materials, and program of service fundamental to the achievement of educational goals in elementary and secondary schools. Those aspects of administration in which the librarian and school administrator are most directly concerned — physical plant, budget, public relations, staffing, scheduling, and record keeping — are stressed.
VINCENT PICCOLO Daily: 11:20 a.m.

SS9-58 **Diagnosis and Correction of Reading Difficulties** **Rm. S-132 3 sem. hrs.**
This course is designed for experienced teachers who have taught reading in the regular classroom or in a special reading program.

The prerequisite is any general reading course taken at Worcester State College or elsewhere. The major emphasis will be given to identifying and removing specific reading deficits, particularly in the regular classroom. Causes of retardation will be considered. The effects of special learning disabilities on reading achievement will be investigated. One course requirement is the case study of a pupil who is a disabled reader. Students in the Reading Specialist Sequence are required to take this course.

MARION J. JENNINGS — Daily: 11:20 a.m.

SS8-56 Foundations of Reading — **Rm. S-225A 3 sem. hrs.**

This course is designed to cover the function of reading in the modern school program, effective procedures for developing the basic reading skills, practical techniques for improving pupil competence in the reading-study skills of content areas and methods of diagnosing and correcting reading deficiencies.

RUTH ALLEN — Daily: 11:20 a.m.

SS9-868 Laboratory Workshop in the Natural Sciences — **Rm. S-301 3 sem. hrs.**

Workshops participants will spend most of their time in the laboratory. They will be assisted in developing a store of functional demonstrations and experiments which may be applied at the elementary and secondary levels. Materials will be drawn from the physical and biological sciences, mathematics, and earth science. There are no prerequisites.

MELVIN MERKEN — Daily: 11:20 a.m.

SS9-65 Occupational Information — **Rm. S-227 3 sem. hrs.**

This course is designed to help administrators, counselors, and teachers to better meet the needs of youth through complete guidance techniques. The course is organized to help develop competencies in the following areas of Occupational Information; classification and description of jobs and industries, occupational trends in relation to socio-economic changes, collecting information, filing information and evaluating information about occupations and training. Emphasis will be placed upon using Occupational Information, with groups and with individuals, in the public school system.

G. FLINT TAYLOR — Daily: 11:20 a.m.

SS8-443 Physical Geography — **Rm. S-126 3 sem. hrs.**

A description of the major physical processes that shape the surface of the planet earth with an analysis of the distribution of resulting surface features. Several opportunities will be available to examine first hand the physical processes in action by way of local field trips.

ROBERT THOMPSON — Daily: 11:20 a.m.

SS9-57 Reading Skills in the Secondary Schools — **Rm. S-125 3 sem. hrs.**

This course is designed for secondary school teachers in all subject matter areas who wish to improve their competencies

in helping students to read effectively. Emphasis will be placed upon pupil growth in independence in the study skills in each of the content areas and upon the development of lasting reading interests.

DORIS JOYCE — Daily: 11:20 a.m.

SS9-101 **School Public Relations** — **Rm. S-314 3 sem. hrs.**

A study will be made of current practices of the school and community working together the use of community resources, co-operative school-community committees and their activities for better schools and more effective educational programs. An evaluation will be presented of means of co-operating to bring about sound economic support in order to improve mutual facilities and services for pupil development and community improvement.

ROBERT W. GOSS — Daily: 11:20 a.m.

SS8-187 **The Influence of the Romantics on Modern Poetry** — **Rm. S-226 3 sem. hrs.**

The course will emphasize the impact of the major Romantic poets, Wadsworth, Coleridge, Byron, Shelley and Keats on twentieth century poetry.

PAUL EDMUNDS — Daily: 11:20 a.m.

EVENING CLASSES MEET MONDAYS, TUESDAYS, THURSDAYS 7:00–9:45 p.m.

SS9-778 **Advance Philosophical Fnds of Education, Sec. B** — **Rm. S-224 3 sem. hrs.**

An existential approach to the nature and meaning of education. This course is designed to examine the basic metaphysical principles of the major philosophers and to demonstrate how they effect the existence of the individual and the dominant theories of education in the western tradition. Contemporary social, philosophical and moral issues will be evaluated in conjunction with these theories in an effort to arrive at a positive and viable foundation for the education of the person and society. The student will be expected to work with primary source material. Prerequisites: Undergraduate credits in both Philosophy and in Philosophy of Education or equivalency.

DONALD F. TRAUB — 7:00–9:45 p.m.

SS9-753 **Advanced Psychological Fnds of Education, Sec. B** — **Rm. S-205 3 sem. hrs.**

In this course, class-members will study and evaluate the role of those environmental, mental, and extra-mental forces which motivate all learners to utilize fully and effectively their capacities; aptitudes and attitudes. It includes a systematic analysis of the major schools of psychology with special attention focused on the contemporary schools. Attention is given to the teachers' role in the learning process and special emphasis will be centered

on the application of these principles to specific classroom situations. Prerequisite: 9 sem. hrs. undergraduate credit in General Psychology and Education Psychology.

RICHARD O'CONNOR 7:00–9:45 p.m.

SS9-953 Biology of Animal Reproduction **Rm. S-132 3 sem. hrs.**
This course will consider the principles underlying the continuation of life (including cellular and organismic reproduction, evolution of reproductive systems, reproductive cycles, immunology of reproduction, embryogenesis, heredity, and eugenics). It will be directed towards expanding the background of those who have had a minimum of formal training in the biological sciences. The lectures will be supplemented with appropriate audio-visual materials and/or laboratory demonstrations and/or exercises.

BRUCE RUSSELL 7:00–9:45 p.m.

SS8-279 Communications Theory **Rm. LRC 3280 3 sem. hrs.**
This course is intended to introduce the student to the theories of communication, and the relationship of such theories to human and mechanical processes. The course is designed to aid the student in identifying channels of communications, the effect/affect of communications, and the design and use of all communications modes and channels. The course utilizes communications theory in the practical experience of designing and disseminating messages.

ROBERT T. JONES 7:00–9:45 p.m.

SS8-493 Comparative Revolution **Rm. S-123 3 sem. hrs.**
A broad comparative study of the causes and dynamics of major revolutionary movements and ideologies in Western History. The framework within which these occurred, their theoretical basis, appeal, components and results will be studied.

GERTRUDE LEEDS 7:00–9:45 p.m.

SS8-466 Contemporary Criticisms of the American Economy **Rm. S-312 3 sem. hrs.**
This course examines some of the radical criticisms of the American economy. The analysis includes consideration of the military-industrial complex, charges of American imperialism, sex and racial discrimination in employment and the problems of poverty and wealth in the United States.

GEORGE KELLEY 7:00–9:45 p.m.

SS8-601 Continuing with Spanish **Rm. S-311B 3 sem. hrs.**
A course designed for those who wish to improve their knowledge of Spanish. This will be accomplished through reading Modern Short Stories emphasizing the review of the fundamentals of Spanish grammar, reading skill and some aspects of Spanish culture. Carries three (3) hours of college credit which may be applied beyond the first year level. Prerequisite, one year of college Spanish (or equivalent).

FRANCISCO ALCALA 7:00–9:45 p.m.

SS8-606 **French Phonetics** **Rm. S-311A 3 sem. hrs.**
A theoretical and practical study of the French sound system. Topics considered are the production and comprehension of French vowels and consonants, emphasizing the special problems of English speakers, rhythm, intonation and transitional phenomena. Laboratory practice in pronunciation and discrimination is provided.
This course should be of particular interest to those who teach or intend to teach French. Prerequisite: Completion of a college French course at the intermediate level or the equivalent.
ROBERT HARTWIG 7:00–9:45 p.m.

SS8-175 **Modern Drama** **Rm. S-126 3 sem. hrs.**
A survey of major English, Irish, American, and Continental playwrights of the twentieth century. Playwrights to be included: Ibsen, Shaw, Synge, Yeats, Eliot, Brecht, Odets, Wilder, O'Neil, Williams, Miller and others.
JEFFREY ROBERTS 7:00–9:45 p.m.

SS8-519 **Number Systems** **Rm. S-125 3 sem. hrs.**
The course begins with a discussion of the ingredients of an algebraic system; namely, elements, sets, mappings, operations, and relations.
The course continues with the introduction of the postulational method of modern algebra with Peano's axioms for the natural number system from which the systems of integers, rational numbers and real numbers are evolved. Two algebraic systems are then introduced, the integral domain and field. The field of integers modulo a prime, polynomial domains, the complex number field, and much of the elementary theory of equations dealing with polynomials is included in discussing the integral domain and field.
VITO CAMPO 7:00–9:45 p.m.

SS9-66 **Personnel Placement Services** **Rm. S-219A 3 sem. hrs.**
This is a required course for personnel workers in the public schools. This course will introduce occupational, educational and personnel career studies for appraisal and evaluation; statistical analysis of job needs and opportunities; including group and individual interviewing techniques; local, state and federal job studies and opportunities; clinical procedures; a full review of the most important aspects of personnel work on the elementary, secondary and college levels. Setting up and appraising personnel programs on all levels will be stressed and studied.
TO BE ANNOUNCED 7:00–9:45 p.m.

SS8-470 **Principles of Sociology I** **Rm. S-313 3 sem. hrs.**
A basic course designed to acquaint the student with man's cultural heritage, the environmental and social forces that shape personality, the influence of the group on the individual, and the nature of social institutions. Stress is placed upon contemporary American society.
FRANK PIZZIFERRI 7:00–9:45 p.m.

SS8-270 Reference Sources and Methods, Pt. I **Rm. LRC 324 3 sem. hrs.**

Designed to acquaint the student with the philosophy and techniques of reference service. The content and use of the basic reference tools also will be covered. Students will use the college library in practical reference problems.

BERNARD MCGOUGH 7:00–9:45 p.m.

SS9-52 Research in Education, Sec. B **Rm. S-226**

This course will stress the use of appropriate research methods in selection and evaluation of data. It is designed to aid the graduate student in the preparation and understanding of research reports. Major areas of emphasis will include the nature of and criteria for evaluating research, library techniques and resources, selection and documentation, organization and format of report, and necessary statistical concepts and methods of research. The student will be expected to demonstrate his knowledge of these in a term research study.

DAVID W. HILTON 7:00–9:45 p.m.

SSW8-004 Drug Education **Rm. S-117B 3 sem. hrs.**

This course is designed to provide the student with an understanding of the beneficial and harmful uses and effects of drugs; the motivations behind drug misuse and abuse, especially among youth; and the implications of this problem on the individual and society. Considerations will also be given to legislative and educational efforts in this subject area. Emphasis will be placed on group dynamics and class interaction.

DOROTHY GIRDANO Date: July 3–14 Time: 8:30–12:30 p.m.

SSW8-005 Creative Thought and the Minority Experience **Rm. S-211B 3 sem. hrs.**

This course is designed to provide opportunities to discover, to explore and to evaluate creative expression of minority groups as they are related to the minority experience in America. Opportunities will be provided to permit participants to select the areas of greatest personal interest.

CATHERINE I. QUINT Date: July 17–28 Time: 8:30–12:30 p.m.

SSW8-006 Movement Workshop for Exceptional Children **Rm. G 23 3 sem. hrs.**

Theory and practice. Participation, planning and teaching creative movement experiences. Theories of learning relating to movement. Combining creative arts-music, art, drama, literature — with movement. Emphasis will be on child-centered activities by way of setting up group problems which require individual and creative solutions.

HELENA SEMERJIAN Date: July 3–14 Time: 8:30–12:30 p.m.

INSTITUTE

SS8-101 Styles and Strategies in Early Childhood Education

Director: Josephina Concannon

Classes held in the New Theatre at Worcester State College

First Week: June 26–30 Time: 8:30–11:30 and 1:00–3:00 p.m.

Second Week: July 3–7 Time: 1:00–3:30 p.m.

SPECIAL WORKSHOPS

SSW8-002 Behavioral Objectives: Help or Hindrance **Rm. LRC 161N**

This workshop will focus on the construction, use and relevance of behavioral or educational objectives in elementary and secondary school teaching. Participants will gain competence in identifying and writing behavioral objectives in both the cognitive and affective domains. Possible alternatives to behavioral objectives will also be discussed.

DAVID QUIST Date: July 3–14 Time: 8:15–12:30 a.m.

SSW8-003 Creative Writing for Elementary Children **Rm. S-225B 3 sem. hrs.**

This course is designed to help make teachers aware of what characteristics creative persons display. After learning what these characteristics consist of, teachers will be shown ways in which these characteristics can be developed and strengthened in children's writings. Teachers, themselves, will be led through the same steps and exercises their pupils will be led through so that their own creative writing abilities can grow. Professional books dealing with creative writing which have been written by authorities in the field will be studied. Children's books and other materials which can stimulate children's own creativity will be worked with and discussed.

Date: July 31–August 11

A. BARBARA PILON Time: 8:30–12:30 p.m.

SSW8-007 Open Classroom Theories Workshop **Rm. S-211A 3 sem. hrs.**

Open Education, A Practicum and Rationale

An opportunity to experience open education by becoming involved in the team planning of interest areas. Means of assessment as well as options for learning will be implemented.

Prerequisites: 1. Now teaching in an open school. 2. Intent to teach in an open school. 3. or permission of the instructor.

Date: July 17–28

MARILYN HELFENBEIN Time: 8:30–12:30 p.m.

SSW8-008 Workshop in the New Elementary Science Curricula **Rm. S-304 3 sem. hrs.**

This eourse is designed to prepare teachers in the philosophy, major objectives, teaching methodology and materials of the newer elementary science curricula. Emphasis will be placed on the proeess or doing of seience rather than on the product or content of science. Materials will be developed for classroom use, and evaluated. These aetivities are aimed at developing a positive attitude toward the teaehing of science at the elementary level.

Date: July 3–14

MICHAEL A. BURKE Time: 8:15–12:30 p.m.

SSW8-009 Dev Indiv Math Activities — Elementary Level **Rm. S-316 3 sem. hrs.**

Purposes: To survey commereial materials and teacher-made games whieh ean be adapted for use in traditional and open-classroom situations. To explore methods for eo-ordinating mathematies aetivities with the total school program and for developing activities to strengthen logical thinking as well as the typical quantitative skills assoeiated with mathematics currieulums. To produee and organize many independent mathematics activities for your own elassrooms in a workshop atmosphere.

Date: July 17–28

MAUREEN STEFANINI Time: 8:15–12:30 p.m.

FOR FURTHER INFORMATION CONCERNING YOUR PROGRAM OF STUDY, PLEASE CONTACT:

MR. JOHN F. EAGER, *Director*

MR. PAUL F. O'NEIL, *Associate Director*

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